

# BST PROCEDURES AND TIMELINE

## PURPOSE:

To develop a critical path planning method that incorporates developing and cross-checking candidate BST projects against other proposed program activities while providing sufficient lead time to address maintenance deficiencies and preparatory needs ahead of treatment.

## NARRATIVE:

In order for BST treatments to achieve their maximum effectiveness, significant maintenance work normally needs to occur ahead of the activity including items such as major maintenance of shoulders (for proper cross drainage); sealing of cracks; patching of potholes or severely raveled areas; and leveling of severely uneven pavement typical sections. Historically, the County Maintenance Engineer (CME) has developed a list of candidate projects and conferred with the Road Oil Supervisor on what is requested to be paved in the following paving season; however, experience has shown that this practice does not allow sufficient time to adequately address pre-application maintenance requirements and pipe replacements. Because the BST program has historically been developed independently of the plant mix program, there has not always been a good cross-check in place for identifying overlapping projects that are either included on the plant mix program (developed by the District Office) or through other programs such as Transportation Improvement Program (TIP), Division Purchase Order Contract (POC), etc. In addition, lack of a consistent method of communicating the planned program activities to other offices such as Traffic or Roadside Environmental has lead to duplicated work efforts (for example, traffic may paint a road in the spring only to have Road Oil place a treatment over the road in the summer)

To better address planning and scheduling of activities along with improved coordination / communication between departments, a new BST procedure and timeline is proposed. Under the proposed plan, the CME will still be responsible for determining which candidate projects should be considered for BST treatment; however, the CME should be planning 2 years out using the *Section Concept* to the maximum extent possible (i.e., by April 1, 2007 the CME should have identified the section or sections to be addressed plus and additional projects of interest for the 2009 paving season). It is suggested that the CME use the *Condition Type Paving Report Tool* (where available) in determining candidate projects. The development of the BST program is to be developed in conjunction with the development of the plant mix program and both program candidates (BST and Plant Mix) should be forwarded to the District Engineer by April 1. The District Engineer will be responsible for comparing the programs to the *District Paving Master Plan* for consistency with the overall plan goals and to check for any overlap with TIP, Division POC, etc.. If any modifications are required to the forthcoming year's plan (2008 season) or the proposed plan (2009 season), this is the appropriate time to investigate such changes. Upon approval of a draft plan, the District will forward the plan (with any modifications) to the CME by May 1. The CME and Road Oil supervisor will then schedule a joint field review of the program in order to identify seal type, stockpile locations, pre-application maintenance needs, and who will be responsible for addressing any crack pouring or AMZ patching needs (contract vs. maintenance force account vs. road oil force account). In addition, the CME will need to request Hydraulic Review as necessary for any major pipe size increases (required if going from  $\leq 48"$  to  $>48"$  Diameter). The field review should be completed by June 30, at which time the CME will compose the program into a *Standard Transmittal Format* and forward to Traffic Services and Roadside Environmental for use information use in performing their respective planning. The CME will need to transmit any permitting requests for crossline replacements to the Division Environmental Officer (DEO) using the *Environmental Review List*. It is desirable to submit for

permitting as soon as practical after field review so that permits will be received and maintenance work for the 2009 program can begin in October, 2007. This schedule allows an approximately 18-month window to replace crossline pipes, perform shoulder maintenance, pour cracks, and perform patching / leveling, preferably in that order. In addition to beginning the work on the 2009 program, it is imperative that the CME ensure that pre-treatment work for the upcoming season (2008) is on schedule. A *Division Program Calendar* is proposed that would assist in notification of critical dates for implementing the program. PLEASE NOTE: Upon initial implementation of this program, it may be necessary to 'skip' some pre-treatment activities for the current and next year's program and begin focusing on the proposed 2-year out program.

### **SUGGESTED PRACTICES:**

*Section Concept* – Divide the county into maintenance 'sections' based on geographic constraints, supervisor areas, etc.. It is ideal to have no more secondary miles in a section than can reasonably be treated by road oil in a given season. When selecting candidate road oil projects, one should strive to treat all applicable roads within a section, thereby allowing pre-treatment activities to be focused within a section (for centralized waste disposal and materials stockpiling).

*Condition Type Paving Report Tool* – A tool developed by GIS for Division 6 that allows queries by any type or combination of types of information that is included in the Pavement Condition Survey (such as volume vs. rating or severity of raveling)

*District Paving Master Plan* – An overall master planning map which designates routes that necessitate plant mix based on volumes and/or traffic types versus those routes which are more appropriate for BST or slurry application (based on traffic volume / type and area type – not current condition). This map needs to be periodically updated as traffic volumes / types change.

*Standard Transmittal Format* – The spreadsheet report format utilized by Road Oil that incorporates Road Oil information, Maintenance Requirements (from field review), and Traffic Information. The Condition Type Paving Report Tool can automatically generate spreadsheet reports in this format.

*Environmental Review List* – A Word based table that is to be utilized in transmitting / updating information to the DEO. The table includes location, description of existing versus proposed pipes size / length, and a status check-off for review date, permit required, permit received, MCC received.

*Division Program Calendar* – A calendar system that includes that associated target dates for the BST program along with advanced notification of dates due.